



## MEETING NOTES

|                                  |  |
|----------------------------------|--|
| <b>Meeting Topic and Number:</b> | In-water design for remedy for the Gasco/Siltronic sediments site - Schedule, Deliverables, and Milestones<br><br>Meeting No. 2  |
| <b>Meeting Date &amp; Time:</b>  | 06/05/2017 at 1:00pm   |
| <b>Project #:</b>                | 8128.02.04   |
| <b>Project Name:</b>             | EPA Administrative Order 09 – In Water and Riverbank   |
| <b>Meeting Location:</b>         | Anchor QEA Office, Seattle, Washington   |
| <b>Recorded By:</b>              | Mike Murray, Maul Foster & Alongi  |
| <b>Attendees:</b>                | S. Sheldrake – EPA<br>S. Coffee, L. Peterson – CDM-Smith<br>R. Wyatt – NW Natural<br>D. Bayuk, S. Greenfield – Oregon DEQ<br>B. Hung, C. Stivers, J. Verduin, R. Barth – Anchor QEA<br>M. Burr – Siltronic Corporation<br>M. Murray – Maul Foster & Alongi |
| <b>Distribution:</b>             | <b>All Attendees, File</b>   |

### Topic 1: Baseline Sampling

The meeting began with a discussion of the EPA baseline sampling plan for the Harbor. EPA said they were waiting to see what the group of 7 is proposing for SWAC delineation this week before EPA releases their sampling plan later in the week. Sean said this in response to a question from NWN regarding the schedule for the baseline sampling for EPA's sampling framework.

## **Topic 2: Gantt Chart and Table 1 Schedule**

Discussion turned to the NWN schedule (Table 1) and Gantt Chart prepared by Anchor-QEA (AQ). EPA asked for the consent decree element to be removed from the Gantt chart, preferring to “remain silent for now, unsure when or how this will come into play.” There was no discussion of Order amendment.

MFA asked where permitting would be accommodated in the schedule, and if EPA was performing the substantive review. Sean indicated that EPA would do the substantive review, but also said he had not discussed this with the Corps of Engineers who may also be anticipating performing the review, further indicating that that 404 compliance would be addressed prior to the 30% design. Sean asked that the Gantt chart be provided to the Corps and TCT (?) as an FYI.

There was discussion of the site-wide Bi-Op vs. site specific Bi-Ops, the latter of which EPA anticipates for RM 11E and 7W. AQ said that the biological assessment would be part of interim design.

There was discussion about the fish window slowing down progress, and Sean said that Plan A would be to work within the fish window, but Plan B could include work outside that window. MFA asked about elements of the Siltronic Implementability Study and AQ responded that those elements would be targeted in the tech evaluations workplan and also during design.

MFA and Siltronic pointed out that the proposed lab analysis and validation timeframe was likely too short, and AQ said they would review and possibly revise.

Generally, the parties agreed that the approach and schedule set by NWN was sound even though the schedule failed to meet Sean’s January 31, 2019 deadline. Once revised, the dates on “Table 1” would become due dates.

Siltronic (Myron) stated that Siltronic is open to working with NWN, and believes that NWN’s proposed approach makes sense, but, as respondents to the order, Siltronic wants an opportunity to review/comment on documents before they were submitted to EPA. Bob (NWN) responded that Siltronic can see the documents at the same time they are sent to the rest of the team (EPA etc.), or Siltronic can enter an agreement. Sean said that this was a “behind the scenes” aspect, and that separate sets of comments would be unproductive.

## **Topic 3: PTW and RAL Extents**

The discussion turned to reconciling PTW extents and RAL extents, and Sean indicated RAL extents should include other items besides PAH. AQ had questions about the dredge prisms which EPA and CDM said they would need to look into before answering. There was discussion about the required sample density, and CDM/EPA said that 150 feet would be the minimum

core density, and they would want data from 0-1', 1-2' and 2-3' bml. AQ clarified by asking "for all the SMAs, you need RAL related data at surface, 1-2, and 2-3?" to which EPA said, "yes, that's the plan."

Siltronic sked if design will proceed upriver, AQ said no because they have cores showing no PTW NAPL but they would have to "get into the RALs". Sean said that the sampling package would go into this to see if existing cores can be used.

When asked about connecting the area between Arkema and NWN, Sean said that he was not looking to characterize the site, but wants to find the edges between the railroad bridge and US Moorings, and that it depends on how deep the RAL exceedances go. AQ stated that there is a natural break between Arkema and NWN which does not represent a data gap.

#### **Topic 4: Erodibility Assessment**

Next the conversation moved to the riverbank erodibility assessment, specifically the decision tree from the ROD on this topic. AQ asked if EPA had determined how to satisfy the decision tree diamond for "Erosive". EPA said not yet, and was working with DEQ, who indicated that there was no timeframe for completing this method, and that it would likely be included in the upcoming JSCS revision.

There was discussion about the "Siltronic trapezoid" bank filling activities in the context of not being able to characterize the bank because of the rip-rap. AQ proposed using top of bank and bottom-of-bank boring pairings to evaluate presence of NAPL. A data gap was noted at Siltronic out from location P-42. In response to questions from Dana and CDM, AQ indicated that the evaluation approach would be described in the technical evaluations work plan.

#### **Topic 5: Groundwater and Cap Models**

A discussion of the models (groundwater and cap) followed, with discussion of how to collect empirical data (which EPA wants) when the Fill WBZ is yet to be controlled. AQ said that the Fill remedy would be installed before the in-river remedy, but later stated that the cap would presume fill WBZ discharge as a conservative assumption. AQ proposes using the empirical data to "corroborate" the groundwater model, presumably to use the groundwater model during design. Dana added that the goal of the empirical data collection is not clear, stating that the modeling shows that the HCC is not reversing gradients offshore, and at some depths; there is a shadow in the HCC system, and that the Fill WBZ is not affected in any way by the HCC. AQ stated that the "HCC system would run forever."

#### **Topic 6: BANCS Assessment**

The discussion circled back to erodibility (riverbank), during which MFA asked if the EPA/DEQ was looking to the BANCS assessment. Sean said generally, yes, but combined with

an evaluation of riverbank material above the RALs. AQ wanted confirmation that, based on as-builts, EPA/DEQ could agree that the Siltronic riverbank is not erodible, which MFA added that the Siltronic riverbank had very high (stable) BANCS score. Sean indicated that the as-builts are a strong case but still wants to see the material assessed relative to the RALs, however that framework is still under discussion with DEQ.

#### **Topic 7: Dredge Performance Criteria**

AQ asked about dredge performance criteria – would the criteria be elevation based or concentration based. EPA/CDM was still working on that, and that for elevation based the Z-layer data density would need to be high, and for concentration based they would use the 95% UCL. NWN asked if they would need to run the RAL for all chemicals, to which EPA said yes.

#### **Topic 8: Structures**

A brief discussion of structures followed, which Sean indicated their intent was to not have people “saving” derelict structures in order to avoid dredging.

#### **Topic 9: BaP Toxicity Change**

NWN asked about the recent IRIS toxicity change for Benzo(a)pyrene (a PAH) which had its toxicity recently downgraded, and Sean said that they don’t plan to incorporate that change in the near term, and that they don’t see this change affecting RALs.

#### **Action Items:**

Action items included AQ revising the Table 1 and Gantt chart (to specifically remove mention of the consent decree), and to deliver the draft pre-RD technical evaluations work plan on/by July 20.